

Percutaneous Transluminal Coronary Angioplasty (PTCA or Coronary Angioplasty)

Fatty deposits (plaques) that have accumulated on the inside of the coronary arteries can narrow these passages considerably, causing blood flow to the heart to be dangerously reduced. Providing adequate circulation to the heart muscle is important to prevent a heart attack. Percutaneous transluminal coronary angioplasty (PTCA) can improve the blood supply. They are performed on people who have chest pain (angina) and sometimes on those who have had a heart attack.

PTCA is done during cardiac catheterization. A thin, plastic tube, called a catheter, is inserted into a blood vessel in either the right groin or the right arm. Once it is positioned into the coronary artery near the narrowed portion, a smaller catheter with a deflated balloon at its tip is threaded through the cardiac catheter. When the balloon catheter reaches the narrowed portion, the balloon is inflated to flatten the fatty deposit against the artery wall. In other instances, the balloon is used to deliver a “stent” for this same purpose. The balloon is inflated, the stent expands and then remains in the artery after the balloon is removed.

The procedure is monitored on an x-ray screen that magnifies the images so the doctor can observe when the artery is open sufficiently. Once the artery is opened and blood is flowing more freely through the vessel, the balloon catheter is removed.

Research studies, as well as recommendations of the American College of Cardiology and the American Heart Association, indicate that a hospital perform a minimum of 200 PTCAs per year and that surgeons perform 125 during the training period and a minimum of 75 PTCAs per year. However, some research studies have suggested that hospitals that perform 400 or more procedures per year have better outcomes than hospitals who perform fewer than 400 cases per year. It is important to note that a recent study indicates that while “the American College of Cardiology/American Heart Association guidelines have minimum volume standards that remain at 200 procedures annually... even lower minimum volume standards may be justifiable in less populated areas, where the alternative is no access to angioplasty at all.”

Region	Subregion Hospital	Average Annual Volume
Central / Northeastern Region		
Columbia		
	Boone Hospital Center	1005
	Columbia Regional Hospital	6
	University Hospitals and Clinics	444
Jefferson City		
	Capital Region Medical Center	217
	St. Mary's Health Center	399
Rest of Area		
	Audrain Medical Center	4
	Bothwell Regional Health Center	1
	Lake Regional Health System	192
Kansas City / Western Region		
Clay / Platte Counties		
	North Kansas City Hospital	675
Eastern Jackson County		
	Independence Regional Health Center	239
	Medical Center of Independence	39
Kansas City (Jackson County)		
	Baptist Medical Center	252
	Research Medical Center	503
	Saint Joseph Health Center	573
	Saint Luke's Hospital	1681
Rest of Area		
	Heartland Regional Medical Center	458

[See page 20 for references, numbers 4, 7, 10, 15, 18, 20, 22, 23, 29, 30, 31 and 34.]

Region	Average
Subregion	Annual
Hospital	Volume
Southeastern Region	
Cape Girardeau	
Saint Francis Medical Center	225
Southeast Missouri Hospital	395
Southwestern Region	
Joplin	
Freeman Health System	593
St. John's Regional Medical Center	843
Springfield	
Lester E. Cox Medical Center North	1
Lester E. Cox Medical Center South	891
St. John's Regional Health Center	1539
Rest of Area	
Skaggs Community Health Center	89
St Louis / Eastern Region	
St. Charles County	
SSM St. Joseph Health Center	251
St. Louis City / County	
Barnes-Jewish Hospital	1216
Christian Hospital Northeast-Northwest	746
Depaul Health Center	292
Des Peres Hospital	245
Forest Park Hospital	186
Missouri Baptist Medical Center	1027
Saint Louis University Hospital	222
SSM St. Joseph Hospital of Kirkwood	214
SSM St. Mary's Health Center	520
St. Anthony's Medical Center	1126
St. John's Mercy Medical Center	494
St. Luke's Hospital	524
Rest of Area	
Jefferson Memorial Hospital	136



Procedure-Specific Questions

- ◆ How do I know if I am a candidate for PTCA?
- ◆ How safe is PTCA compared to other methods of opening up my coronary artery?
- ◆ How effective is PTCA? Will it ever have to be repeated at some point?

(See page 3 for other questions)